

Perhaps no other description of work executed at the present day in England, calls for such asperity of condemnation as much of our London brickwork: where it is to be exposed to view, it is too often bad enough; but where it is to be concealed, as is so often the case, by vicious plaster fluting, one-half the expense of which might have made it work indeed, no pen can describe adequately its abominations, its pseudo-arches, its want of bond, its shattered condition, its internal unceremonious state, and its general badness of material.—From *Bertholme's "Essays on the Art of Science, &c., in Modern English Building."*

Literature.

Fisher's Colonial Magazine.—No. I.—New Series.

A new issue of this valuable periodical has been commenced, with a reduction of price from half-a-crown to a shilling per monthly number, so as to suit the purses of every grade, whether colonists, emigrants, or home readers. Among the many articles of interest contained in this periodical which we recommend to our subscribers, the article entitled "On the Use and the Practicability of the Construction of a Canal or other Communication from the Atlantic to the Pacific," will be of very great interest. The following are remarks contained in the paper in question:—

"We are about to offer our sentiments on the formation of a canal of even larger extent than any now existing, either for internal communication, or between rivers, lakes, channels, or even seas, we might call to our aid an intolerable quantum of repetition, but, when on the brink of considering the feasibility of uniting two vast oceans, and that by crossing through a portion of the most stupendous range of mountains on our earth, we become sensible of our relative pigmy weakness in attempting, perhaps rashly attempting, to modify, by human art, the vast works of an all-intelligent, all-powerful, and beneficent Creator.

"The idea of a communication between the Atlantic and Pacific Oceans is not a new or recent one. It did not escape the keen imagination of Columbus, the last days of whose eventful, ever-active, and vastly useful life, were devoted to the deep contemplation of the work. His great mind did not rest satisfied, as well it might have been, with discovering for his fellow-men a new and mighty continent; but, like all master-minds born to improve their species, an achievement gained, was to him the foundation upon which he lifted himself towards the accomplishment of others. But he had already done more than is commonly allotted to man, and, unfortunately for mankind, the great design was left by him for the precarious accomplishment of subsequent ages. After his death, the scheme had attractions for the bold and daring aspirations of the early Spaniards, to whose habits of enterprising adventure, the vastness and sublimity of the project were congenial; but nothing was effected. We are not surprised at little having been done in later times, during the dominion in South America of the Spanish government; for what could be expected, when the political and scientific apathy, but a stagnation of all that is good and profitable to man in his social condition? Beyond a solitary survey, made by order of the government, it would seem, solely and only for the embellishment of the archives of the city of Guatemala, and which was, in truth, not really confined to its dusty dormitory until the South Americans cast off their galling yoke, the matter was hardly thought of. Since the achievement of their freedom, however, the republics of Venezuela and New Granada, and of Central America, have not been idle in sending their dutiful envoys for stability of government, they have found time to do much, by investigation, towards removing the imagined obstacles in the way of the accomplishment of the undertaking, having bestowed much pains in procuring those exact surveys, and other data, which are essential to a careful and accurate consideration of its accomplishment.

"We have thus seen that the New World is in itself naturally of a form eminently favourable to commercial enterprise; but, its clearly also susceptible of great artificial improvement, and particularly and prominently so as respect the subject of our present article; a

subject affecting not only that vast hemisphere itself, but of immeasurable account to the other quarters of the globe. Were a water-communication, by means of a canal for ships, effected across the Isthmus of Panama, through Central America, or even Mexico, it is obvious that the barriest features of our present navigation would be softened down, and that also vast countries abounding in natural resources and wealth would be soon quickened into active commercial life. Instead of the now precarious and dubious route by the Cape of Good Hope to the East Indies and China, and their neighbouring islands, and also Australia, a safe one, occupying much less time, could be effected; not, however, because of there being any great difference of direct distance, but on account of extremely advantageous winds, tides, and weather. In place of the still more hazardous and trying route round Cape Horn, through icy seas, and along inhospitable coasts, to the western shores of America—every day rising in commercial and political consequence—and the islands of the Pacific, now assuming a prominent importance, and also the fisheries in that ocean, an opening through the continent of America, would furnish both a fearless and an infinitely shorter voyage than that so frequently ruinously disastrous one. In short, a glance over the map of the world will make it evident, better than any description that can be given, that the execution of this scheme would send our globe a flood of commercial light, the effects of which would benefit not only Europe, but every part of the habitable earth. It would most emphatically and decidedly advantage those magnificent countries through which it would pass; Europe and North America, unquestionably to an eminent degree; Asia would be vastly benefited by it, and even distant Africa would feel its awakening, enlivening influence.

"The much agitated question of the practicability of a communication between the Atlantic and Pacific Oceans, is now no longer a matter of speculation; if any serious ground for doubt was ever involved in it, such has been now quite dissipated, for competent men, from actual survey, have confirmed what has been always our opinion, the admissibility of its accomplishment, and not only at one, but at several places—although the work has certainly appeared to us to be one of great difficulty, and also of distant and very uncertain fulfilment; necessarily difficult, from the very great magnitude of the work, and remote and precarious from paucity of inhabitants, and want of sufficient capital and enterprise in the states immediately concerned in bringing about its execution. But now that other governments seem to be taking up the matter, we may look for the early fruition of this unspeakable benefit to commerce and civilization.

"As many as four places have been supposed eligible for effecting this junction. It has been proposed that the Gulf of Mexico should be united to the Gulf of Tehuantepec, in the Pacific, by means of a canal, which should join the sources of the river Chimalpa to those of the Rio del Paso. The distance, however, being as great as thirty-eight leagues, added to other unfavourable local circumstances, renders this the least eligible and the least viable one; and then, its being so much to the north, would also detract from its merit; besides, its realization is of more moment to the state of Mexico than to the general interests of the whole commercial world. The second plan proposes a line of communication across Central America, the Isthmus of Panama, the Atlantic up the river San Juan, into the lake of Nicaragua; and thence by a canal to the Pacific. This project has great recommendations, and, we think, is even preferable to any other, which we shall endeavour to make apparent, after having stated the merits of the two most popular ones; the third and fourth plans, which contemplate a passage through the Isthmus of Panama, and have occupied more attention than any of the others: an account of the features, both topographical and statistical of the locality, is essential to an explanation of the subject.

"The Isthmus of Panama, a name which must not be confounded with a province having the same designation in New Granada, is that remarkable ligature, neck, or link of land, more properly speaking, which connects the continents of North and South America. It is sometimes also called the Isthmus of Darien,

a name which is, however, now much out of use, and ought to be expunged on that account from geographical works. It extends from about the meridian of 77° to that of 81° west of Greenwich, its breadth at the narrowest part, which is, opposite the city of Panama, which is situated on the Pacific Ocean, is not less than thirty miles; and it swells out more or less at either extremity, where it blends with the parent continental portions of the New World. The continuity of the great Andes, a range of mountains, which, for the most part, traverses the whole continent of America, is twice interrupted, if not entirely broken, within the limits above defined. The northern Cordillera exhibits the first indication of depression in the province of Nicaragua; but it again rears itself in the province of Veraguas, where it expands its forms into a very fine table-land. In the eastern part of the last-named province it breaks into detached mountains of considerable elevation, and of a most abrupt and rugged formation, until, still further to the east, numerous conical hills make their appearance, some of which are three or four hundred feet high, and having their bases skirted by extensive plains and savannas. These finally disappear, and the country becomes almost unintercepted level, until the conical mountains again thicken, and, becoming connected, form a small Cordillera, which runs again about the Bay of Porto-Bello on the Atlantic, and the Bay of Standano on the Pacific, and in the country of that name to the north-west, where the second break occurs. The land there continues low for a considerable distance, and abounds in rivers—those on the north side flowing to the Gulf of Uruin, or the Bay of Standano, and those on that of San Miguel, beyond which point the Cordillera again rises itself on an extended scale, and enters South America. The general bearing of the mountains in the vicinity of Panama is north-east and south-west. They vary elsewhere, and appear to have a relation to the line of coast, although their course is not always parallel to it. Their height is not considerable; near Panama, their elevation is not more than 1,000 to 1,100 feet; east of Porto-Bello, however, they are considerably higher, and are generally covered with that dense and almost impenetrable forest and vegetation, which can only grow on a soil of great depth and amazing fertility, under the prolific action of great heat and moisture.

"The present very limited communication across the isthmus is maintained chiefly by two lines of road, one from Panama to Porto-Bello, and another equally from Panama by way of the town of Cruces to Gorgona, and the river Chagres to the seaport of the same name, at its mouth. There are some others in use, but little known, and, under the Spaniards, their improvement and multiplication were much discouraged. The present roads are exceedingly bad, and they traverse a mountainous part of the country. That between Panama and Porto-Bello is infinitely the worst of the two principal ones, being in many places almost impassable in the rainy season, from the steepness of the ascents and descents. But the roads to Cruces and Gorgona also had some of the same character, and are extremely difficult in bad weather. A considerable part of the latter, indeed, being merely the bed of what is in winter a large stream.

"The Isthmus of Panama is divided into two provinces, namely, Panama, which includes Darien and Veraguas; these again are divided into the towns of Cruces to Gorgona, and of parishes. By a census taken in 1822, the following was the state of the population in the two provinces:—that of Panama contained 66,188, and that of Veraguas 35,367 inhabitants—making the population of the whole isthmus, for that year, 101,556, an amount which has not since materially diminished. The people are composed of white and coloured, as in the other parts of South and Central America, and are given up to indolence and want of industry, although strong and enduring under occasional fatigue; they are, in point of civilization, less advanced than their neighbours of the same race. The extreme fertility of the soil, together with their great destitution of moral enlightenment, are the chief causes of their general indolence, as, in the absence of the good impulses of civilization, a man can there, notwithstanding, for a small expenditure of pecuniary labour, procure a